

ABSTRACT

The present invention provides a system enabling the control of a combustion environment thereby adjusting the affect of ambient temperatures on the combustion quality on all modes of operation. The system can be described as a system for controlling a combustion environment within a combustion chamber of a hydronic heating system comprising a boiler containing a heat transfer fluid (HTF), a burner within a combustion chamber, and a fluidic distribution network in fluidic contact with the boiler thereby enabling movement of HTF. The temperature control system comprises of a first heating unit for adjusting the temperature of the fuel fed to the burner, a second heating unit for adjusting combustion air temperature and a third heating unit associated with the boiler to heat the HTF in the boiler to operating temperature.